

Work Order ID 100120

April-18-13 9:27:29 AM

ASAP

100120

Page 1

Item ID: 646.3716

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gauge Bracket

Start Date: 4/18/13 Start Qty: 10.00

10

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-04-18

Tooling:

Date:

Run Start *NR1*

QC: Date: SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

646.3700

A

110

0.00

110

Waterjet

Memo

0.00

FLOW CNC Waterjet

Coolei, OBO

1-Cut as per Dwg

CUT ON 45 DEG ANGLE ?

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

10 0 Jm 13-4-19

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control

10 0 Jm 13-4-19

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION <div style="display: flex; justify-content: space-around;"> <div>Rework <input type="checkbox"/></div> <div>Skid-tube <input type="checkbox"/></div> <div>Crosstube <input type="checkbox"/></div> <div>Water Jet <input type="checkbox"/></div> <div>Engineering <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Scrap <input type="checkbox"/></div> <div>Machining <input type="checkbox"/></div> <div>Small Fab <input type="checkbox"/></div> <div>Prod. Eng. Coord. <input type="checkbox"/></div> <div>Quality <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Use-as-is <input type="checkbox"/></div> <div>Thermoforming <input type="checkbox"/></div> <div>Finishing <input type="checkbox"/></div> <div>Rec/Store/Packaging <input type="checkbox"/></div> <div>Other <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Work Order Update <input type="checkbox"/></div> <div>Large Fab <input type="checkbox"/></div> <div>Composite <input type="checkbox"/></div> <div>Supplier <input type="checkbox"/></div> </div>	
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 100120

April-18-13 9:27:29 AM

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Page 2

Item ID: 646.3716

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gauge Bracket

Start Date: 4/18/13 Start Qty: 10.00

10

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 27 2-80 13419				10			
140 *140* Brake NC Brake NC	Bend as per dwg Memo USE 5/32" RAD DIE	0.00 0.00				10			13/04/23
150 *150* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00 13423				10			

151

Out source Anodize

issue P/O: 19794

C213/05/06 (10)

152

Receive + inspect

13/5/17 (10)

153

QCS

13517

10

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION <div style="display: flex; justify-content: space-around;"> <div> <input type="checkbox"/> Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update </div> <div> <input type="checkbox"/> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab </div> <div> <input type="checkbox"/> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite </div> <div> <input type="checkbox"/> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier </div> <div> <input type="checkbox"/> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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Work Order ID 100120

April-18-13 9:27:29 AM

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Page 3

Item ID: 646.3716

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gauge Bracket

Start Date: 4/18/13 Start Qty: 10.00

10

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160		0.00							
160									
SprayPaint	Memo	0.00							CEL 13/05/06
Spray Painting	PRIME IAW MIL-P-23377J TYPE I CLASS N AS PER DWG. (SEE NOTE 4)								
	PRIMER BATCH: 125452. prime @ A.TG.								
170		0.00							
170	QC 14- Inspect Spray Paint	0.00							
QC	6 Memo	0.00							10
Quality Control									
									135-22
180		0.00							
180	Identify as per dwg & Stock Location: 5036	0.00							13/05/10 (10)
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Work Order ID 100120

April-18-13 9:27:29 AM

100120

Page 4

Item ID: 646.3716

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gauge Bracket

Start Date: 4/18/13 Start Qty: 10.00

10

Cust Item ID:

Required Date: 4/25/13 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

13/5/21 9/8
ML5.3-05-17

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Picklist Print

April-18-13 9:27:32 AM

Page 1

Work Order ID: 100120

Parent Item: 646.3716

Parent Item Name: Gauge Bracket

100120

646.3716

Start Date: 4/18/13

Required Date: 4/25/13

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A 12.10.22 NEW ISSUE DD VEREJLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.080

Purchased

No

110

sf

201.4973

0.0306

0.322105

M6061T6S 080

6061-T6 .080 Sheet

**

0.5

Jm13-4-19

Location

Loc Qty

Loc Code

MAT021

201.497264

117285

0.497264

124786

201

124786

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03702

SHEET 1 OF 2

DWG NO. 646.3700

REV: A

PREPARED
BY B. PETERS

DATE: 11/15/12

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: SHEETMETAL

APPROVED BY: ENGR *[Signature]*

MFG *[Signature]*

QC

EFF: NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED ALTERNATE MATERIAL AND REVISED
REFERENCE DIMENSIONS

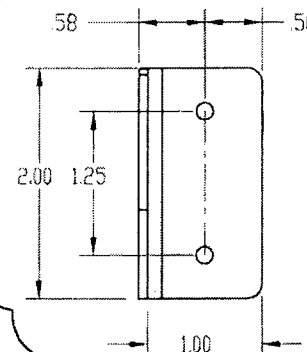
EOR:
D-12-010

SHEET 1, ZONE A2 IS:

IS

△ PRIMARY MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11
ALTERNATE MATERIAL: SS 17-4 PH PER AMS 5604

IS



UNCONTROLLED
SUBJECT TO
REVISION

100120 MCT
13-04-18

SHEET 7, ZONE B1 IS:

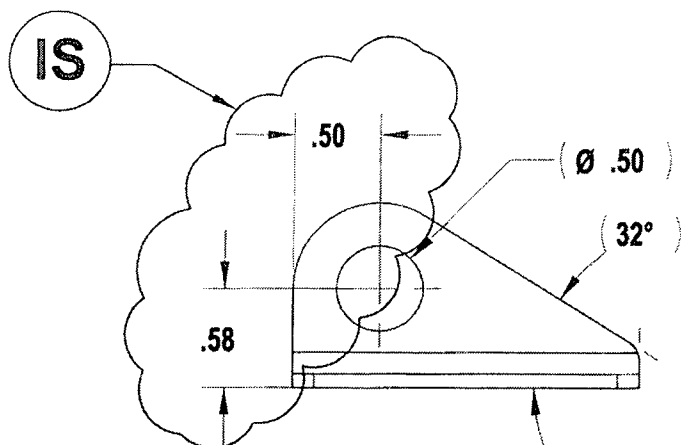
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED
<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM					<input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

100120

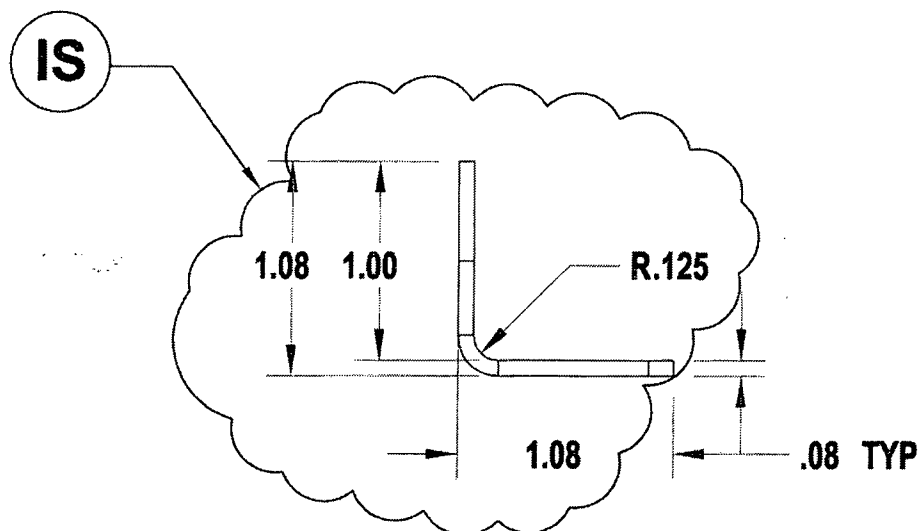
APICAL INDUSTRIES, INC.

ENGINEERING CHANGE ORDER NO. 03702

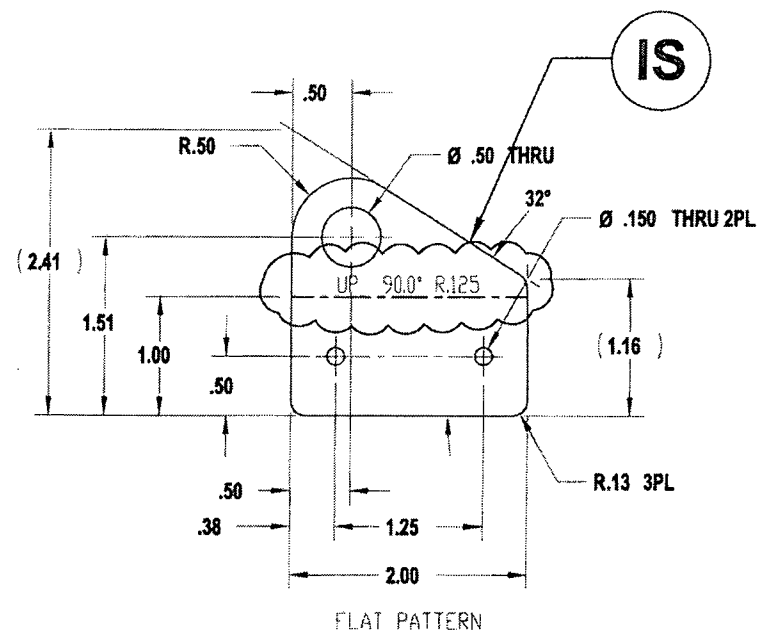
SHEET 2 OF 2



SHEET 7, ZONE C4 IS:



SHEET 7, ZONE D1 IS:



SHEET 7, ZONE B7 IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL/SPECIFICATION
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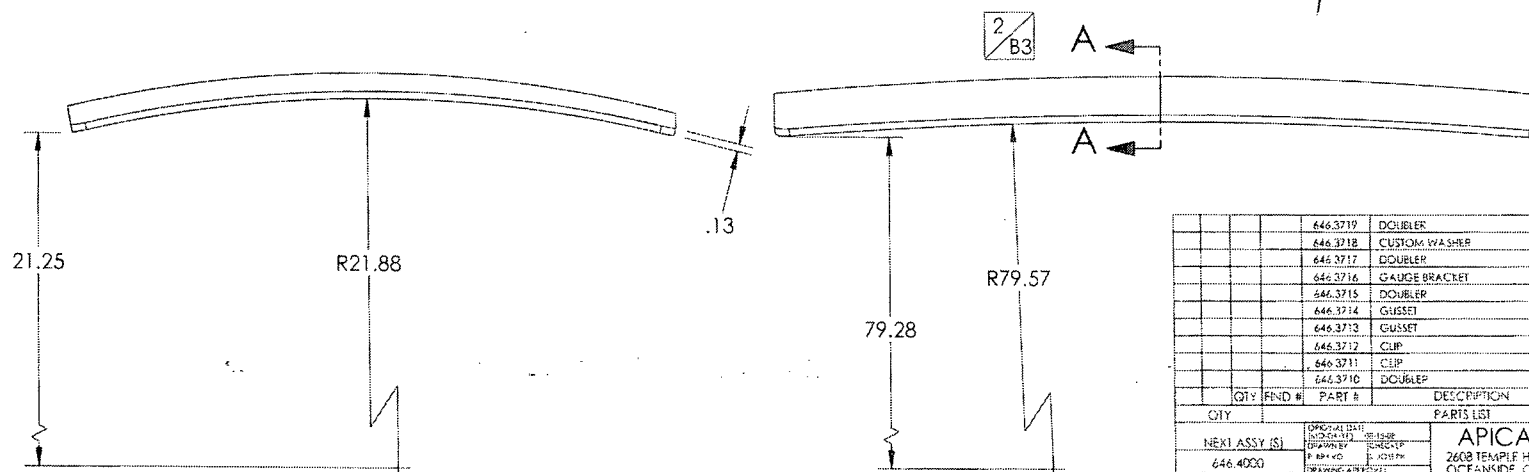
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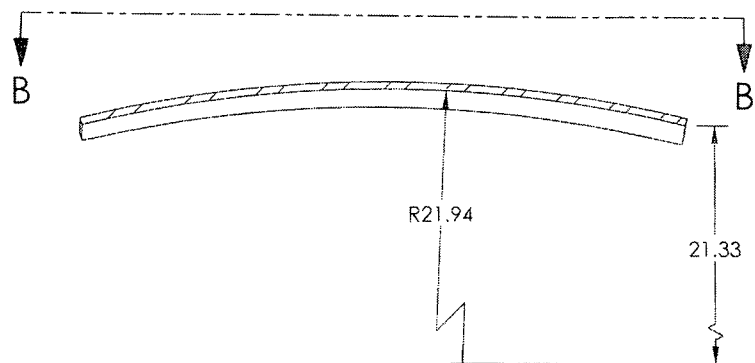
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2. FINISH: HARD ANODIZE 1AW MIL A-8625 TYPE III, CLASS 2, COLOR BLACK; CARDINAL 4860-S0 PRETREATMENT PRIMER PRIME 1AW MIL-P-23377J TYPE I CLASS N
3. MATERIAL: 17-4 PH AMS 5604, CONDITION H900
4. FINISH: PRIME 1AW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES
6. IDENTIFY 1AW MPP-120

646.3710

UNINCORPORATED ECN(S)

03702

[illegible]



SECTION A-A



R395.138

R.13 4PL

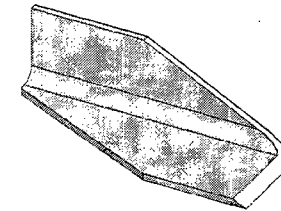
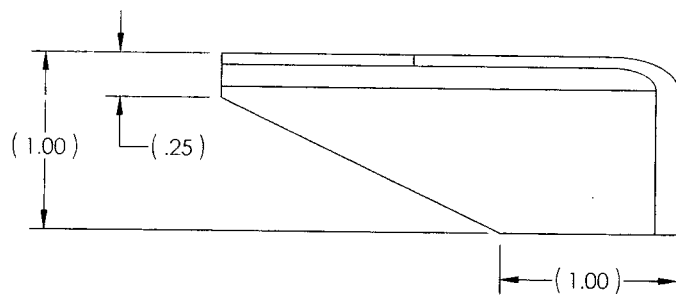
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10.49

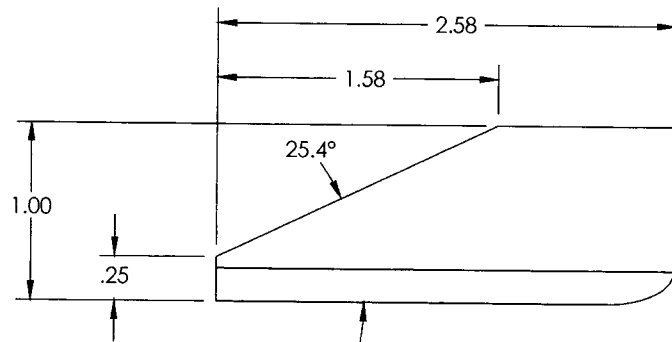
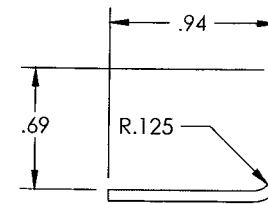
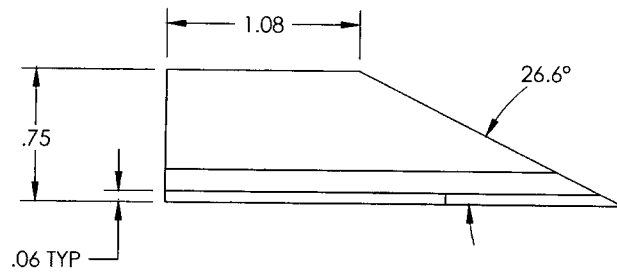
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SECTION B-B

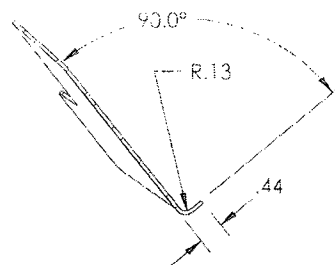
ORIGINAL DATE (MM/DD/YYYY) 08/18/01 DRAWN BY: CHERIEP P. REV. NO: 01/08/01 DESIGNED BY: J. JOHNSON CHECKED BY: J. JOHNSON CONTRACT NO:	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE FRACTIONS DECIMALS ±.01 ALL DIMENSIONS TO BE	SHEETMETAL DATE: 08/18/01 DWG. NO: 646.3700 8 07/26/06 SCALE: NONE
	REV: A SHEET: 2 OF 9



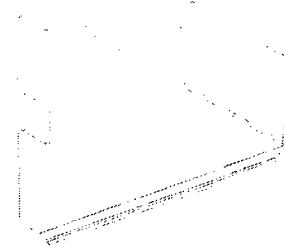
646.3711 SHOWN
646.3712 OPPOSITE



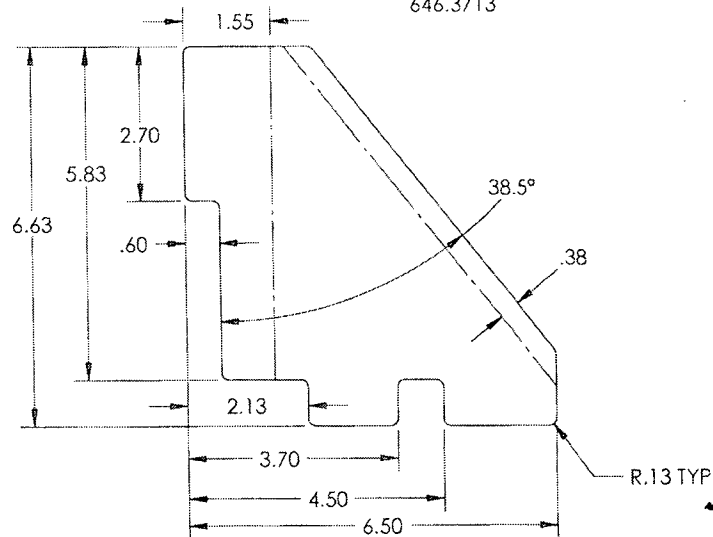
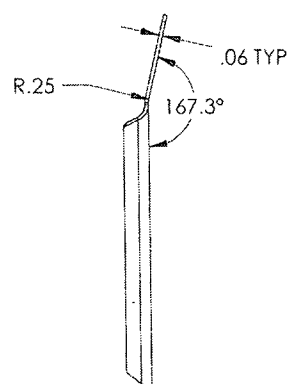
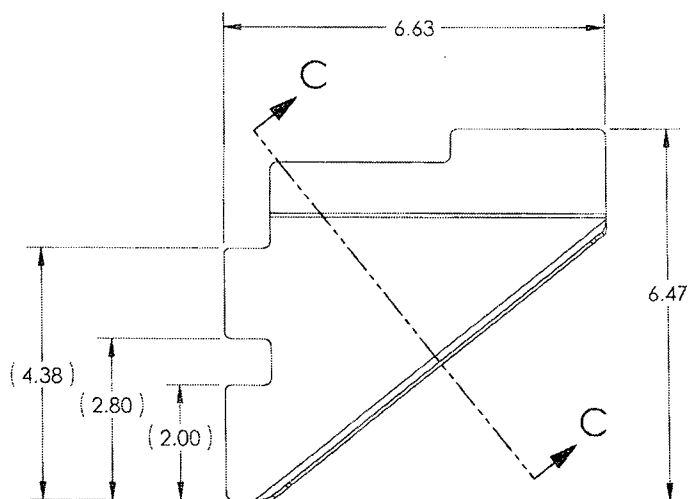
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	DRAWN BY	CHECKER		
	P. BRAVO	J. JOSEPH		
	DESIGNER APPROVAL			
	DATE		SIZE B CAGE CODE 07MZ6 DWG. NO. 646.3700 REV. A	
	CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.005 ANGLES ±.5°			SCALE: NONE SHEET 3 OF 9	



SECTION C-C



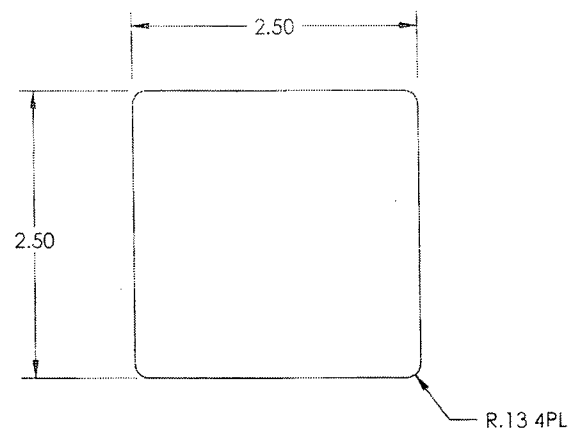
646.3713



FLAT PATTERN

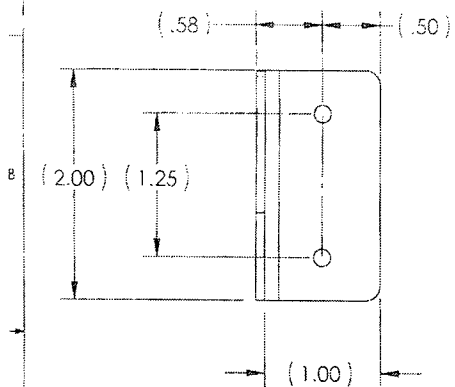
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	CHECKED BY: J. JOHNSON			
	DRAWING APPROVAL:		SHEETMETAL	
	DATE: 10/02/02			
CONTRACT NO.:		SHEET CODE: 646.3700		
UNLESS OTHERWISE SPECIFIED:		SHEET CODE: 646.3700	REV.:	
DIMENSIONS ARE IN INCHES		DATE: 07/02/06		
TOLERANCES ARE:		SCALE: 1:1	SHEET 2 OF 2	
HOLE DIMENSIONS 100				
ANGLES: 1°				

100120

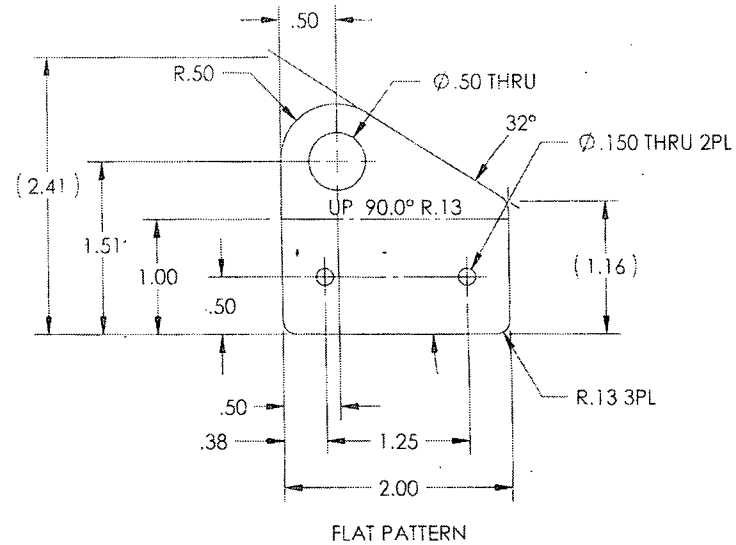
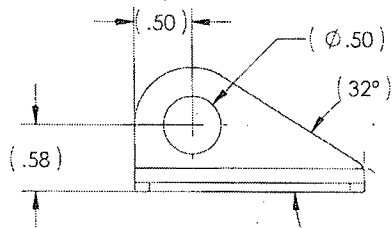
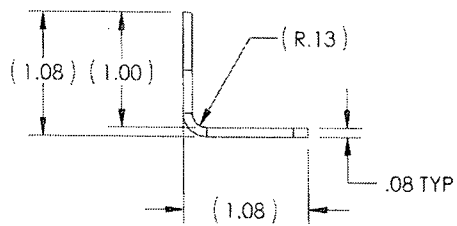


646.3715

NEXT ASSY. (S)	DESIGNED BY	DATE	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 17601724-5300		
	DRAWN BY	CHECKED			
	DESIGNED APPROVAL	DATE	SHEETMETAL		
	DATE				
DIMENSIONS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DECIMALS ARE .001 DIMENSIONS ARE .001 DIMENSIONS ARE .001 DIMENSIONS ARE .001			SIZE B 07M16	DATE 646.3700	REV A
SCALE: NONE			SHEET 6 OF 7		

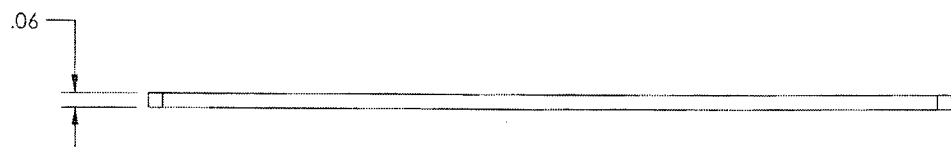
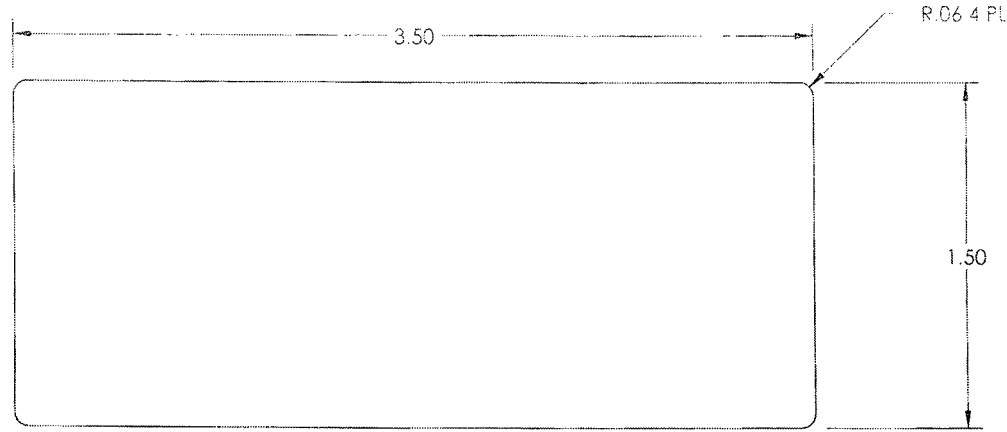


646.3716



NEXT ASSY [5]	OPERATIONAL DATE 06/15/80 DESIGNED BY J. BOWEN DRAWN BY J. BOWEN CHECKED BY J. BOWEN APPROVED BY J. BOWEN DATE 06/15/80	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OAKLAND, CA. 94656-3512 (760) 724-3300
PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	SHEETMETAL
PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	THE ORDER CODE DOWS 465 646.3700
PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	PART NO. 00000000 QTY. 1 UNIT OF MEASURE 1	SCALE NONE SHEET 1 OF 1

100120



646.3717

NEXT ASSY (S)	DESIGNED BY	06-15-08	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3912 (760) 724-5300
	DRAWN BY	C-REDF	
	CHECKED BY	J. JOSEPH	
	DATE	06-15-08	
SHEETMETAL			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES			NFE 8454 0000 8 07M26 SCALE 1:1
646.3700			SHEET 8 OF 8

NEXT ASSY (\$) 1.00000000 2.00000000 3.00000000 4.00000000 5.00000000 6.00000000 7.00000000 8.00000000 9.00000000 10.00000000 11.00000000 12.00000000 13.00000000 14.00000000 15.00000000 16.00000000 17.00000000 18.00000000 19.00000000 20.00000000 21.00000000 22.00000000 23.00000000 24.00000000 25.00000000 26.00000000 27.00000000 28.00000000 29.00000000 30.00000000 31.00000000 32.00000000 33.00000000 34.00000000 35.00000000 36.00000000 37.00000000 38.00000000 39.00000000 40.00000000 41.00000000 42.00000000 43.00000000 44.00000000 45.00000000 46.00000000 47.00000000 48.00000000 49.00000000 50.00000000 51.00000000 52.00000000 53.00000000 54.00000000 55.00000000 56.00000000 57.00000000 58.00000000 59.00000000 60.00000000 61.00000000 62.00000000 63.00000000 64.00000000 65.00000000 66.00000000 67.00000000 68.00000000 69.00000000 70.00000000 71.00000000 72.00000000 73.00000000 74.00000000 75.00000000 76.00000000 77.00000000 78.00000000 79.00000000 80.00000000 81.00000000 82.00000000 83.00000000 84.00000000 85.00000000 86.00000000 87.00000000 88.00000000 89.00000000 90.00000000 91.00000000 92.00000000 93.00000000 94.00000000 95.00000000 96.00000000 97.00000000 98.00000000 99.00000000 100.00000000 101.00000000 102.00000000 103.00000000 104.00000000 105.00000000 106.00000000 107.00000000 108.00000000 109.00000000 110.00000000 111.00000000 112.00000000 113.00000000 114.00000000 115.00000000 116.00000000 117.00000000 118.00000000 119.00000000 120.00000000 121.00000000 122.00000000 123.00000000 124.00000000 125.00000000 126.00000000 127.00000000 128.00000000 129.00000000 130.00000000 131.00000000 132.00000000 133.00000000 134.00000000 135.00000000 136.00000000 137.00000000 138.00000000 139.00000000 140.00000000 141.00000000 142.00000000 143.00000000 144.00000000 145.00000000 146.00000000 147.00000000 148.00000000 149.00000000 150.00000000 151.00000000 152.00000000 153.00000000 154.00000000 155.00000000 156.00000000 157.00000000 158.00000000 159.00000000 160.00000000 161.00000000 162.00000000 163.00000000 164.00000000 165.00000000 166.00000000 167.00000000 168.00000000 169.00000000 170.00000000 171.00000000 172.00000000 173.00000000 174.00000000 175.00000000 176.00000000 177.00000000 178.00000000 179.00000000 180.00000000 181.00000000 182.00000000 183.00000000 184.00000000 185.00000000 186.00000000 187.00000000 188.00000000 189.00000000 190.00000000 191.00000000 192.00000000 193.00000000 194.00000000 195.00000000 196.00000000 197.00000000 198.00000000 199.00000000 200.00000000 201.00000000 202.00000000 203.00000000 204.00000000 205.00000000 206.00000000 207.00000000 208.00000000 209.00000000 210.00000000 211.00000000 212.00000000 213.00000000 214.00000000 215.00000000 216.00000000 217.00000000 218.00000000 219.00000000 220.00000000 221.00000000 222.00000000 223.00000000 224.00000000 225.00000000 226.00000000 227.00000000 228.00000000 229.00000000 230.00000000 231.00000000 232.00000000 233.00000000 234.00000000 235.00000000 236.00000000 237.00000000 238.00000000 239.00000000 240.00000000 241.00000000 242.00000000 243.00000000 244.00000000 245.00000000 246.00000000	
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A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62386

Date: 17-May-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description		
1 lot	Part: ASST 12 PCS 646.3011 17 PCS 646.3410 16 PCS 646.3411 11 PCS 646.3711 11 PCS 646.3712 12 PCS 646.3714 10 PCS 646.3716 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME PER MIL-P-23377J TYPE I CLASS N Job: 20130293 PO: 19794	Rev:	Line:
<p>Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p>ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE: <u>17/5/13</u></p> <p>CERTIFIED SIGNATURE: <u>[Signature]</u></p> <p>RECEIVER SIGNATURE: _____</p>			